IAP7 Rec'd PCT/PTO 05 JUL 2006

PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL LETTER TO THE UNITED STATES	ATTORNEY'S DOCKET NUMBER 2842.43US01		
DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371	U.S. APPLICATION NO. (If known, see 37 CFR 1.5) 10/565,012		
INTERNATIONAL APPLICATION NO. INTERNATIONAL FILING DATE PCT/JP2004/010232 16 July 2004	PRIORITY DATE CLAIMED 18 July 2003		
TITLE OF INVENTION PHOTONIC CRYSTAL WAVEGUIDE, HOMOGENEOUS MEDIUM WAVEGUIDE, AND OP			
APPLICANT(S) FOR DO/EO/US	HOAL DEVICE		
Shigeo KITTAKA, Kazuaki OYA, Keiji TSUNETOMO Applicant herewith submits to the United States Designated/Elected Office (DO/Education Control of Control o	O/US) the following items and other information:		
1. This is a FIRST submission of items concerning a submission under 35 U.S.C. 37			
2. This is a SECOND or SUBSEQUENT submission of items concerning a submission	on under 35 U.S.C. 371.		
This is an express request to begin national examination procedures (35 U.S.C. 3' (5), (6), (9) and (21) indicated below.	71(f)). The submission must include items		
4. The US has been elected (Article 31).			
5. A copy of the International Application as filed (35 U.S.C. 371(c)(2))			
a. is attached hereto (required only if not communicated by the Internation	nal Bureau).		
b. has been communicated by the International Bureau.			
c. is not required, as the application was filed in the United States Receiving Office (RO/US).			
6. An English language translation of the International Application as filed (35 U.S.	C. 371(c)(2)).		
a. is attached hereto.	a. a is attached hereto.		
b. has been previously submitted under 35 U.S.C. 154(d)(4).			
7. Amendments to the claims of the International Application under PCT Article 19	(35 U.S.C. 371(c)(3))		
a. are attached hereto (required only if not communicated by the Interna	ational Bureau).		
b. have been communicated by the International Bureau.			
c. have not been made; however, the time limit for making such amend	ments has NOT expired.		
d. have not been made and will not be made.			
8. An English language translation of the amendments to the claims under PCT A	rticle 19 (35 U.S.C. 371(c)(3)).		
9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).			
10. An English language translation of the annexes of the International Preliminary In Article 36 (35 U.S.C. 371(c)(5)).	Examination Report under PCT		
Items 11 to 20 below concern document(s) or information included:			
11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.			
12. An assignment document for recording. A separate cover sheet in compliance w	ith 37 CFR 3.28 and 3.31 is included.		
13. A preliminary amendment.			
14. An Application Data Sheet under 37 CFR 1.76.			
15. A substitute specification.			
16. A power of attorney and/or change of address letter.			
17. A computer-readable form of the sequence listing in accordance with PCT Rule	_		
8. A second copy of the published International Application under 35 U.S.C. 154(d)(4).			
19. A second copy of the English language translation of the international application			

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO-1390 (Rev. 07-2005)
Approved for use through 3/31/2007. OMB 0651-0021
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

10/565,012	PCT/JP2004/010232	PEICATION NO.	2842.43US01	CKET NUMBER
20. Other items or information: Copy of Notification of Missing Requirements Under 35 U.S.C. 371 in the United States Designated/Elected Office; Postcard Receipt.				
The following fees have been submitted			CALCULATIONS	PTO USE ONLY
21. Basic national fee (37 CFR 1.492(a))		\$300	\$	TO GOL OILLY
				1.
22. Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0 All other situations			\$	
23. Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority			\$	
TOTAL OF 21, 22 and 23 =				
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.				
	Total Sheets Extra Sheets Number of each additional 50 or fraction thereof (round up to a whole number)			
- 100 = /50 =		x \$250	\$	1
Surcharge of \$130.00 for furnishing any of the search after the date of commencement of the national stage		oath or declaration	\$ 130.00	
CLAIMS NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims - 20 =	0	x \$ 50	\$	
Independent claims - 3 =	0	× \$200	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)		+ \$360	\$	
		CALCULATIONS =	\$	
Applicant claims small entity status. See 37 CFR 1	.27. Fees above are reduc	ed by 1/2.		
		SUBTOTAL =	\$ 130.00	
Processing fee of \$130.00 for furnishing the English traclaimed priority date (37 CFR 1.492(i)).	anslation later than 30 mont	hs from the earliest +	\$	
	TOTAL	NATIONAL FEE =	\$ 130.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +		\$		
/11/2006 GFREY1 00000133 10565012	TOTAL F	EES ENCLOSED =	\$ 130.00	
FC:1617			Amount to be refunded:	\$
			Amount to be charged	\$

PTO-1390 (Rev. 07-2005)

Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

b. Please charge my Deposit Account No. in the A duplicate copy of this sheet is enclosed. c. The Commissioner is hereby authorized to charge any add Account No. 16-0631 A duplicate copy of this sheet is d. Fees are to be charged to a credit card. WARNING: Inform be included on this form. Provide credit card information	nation on this form may become public. Credit card information should not and authorization on PTO-2038. not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed
SEND ALL CORRESPONDENCE TO: Douglas J. CHRISTENSEN Patterson, Thuente, Skaar & Christensen, P.A. 4800 IDS Center 80 South 8th Street Minneapolis, Minnesota 55402	SIGNATURE Douglas J. Christensen NAME 35,480 REGISTRATION NUMBER



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P. Dex 1450 Alexandria, Viginia 22313-1450 www.umpto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATT	Y. DOCKET NO.
10/565,012	Shigeo Kittaka	28	342.43US01
		INTERNATIONAL AI	PLICATION NO.
	_	PCT/JP04	PCT/JP04/10232
Douglas J Christensen		I.A. FILING DATE	PRIORITY DATE
Patterson Thuente Skaar & Christensen 4800 Ids Center 80 South 8th Street	RECEIVED DOCKETING	07/16/2004	07/18/2003
Minneapolis, MN 55402	MAY 1 1 2006	CONFIDE	AATION NO 5169

PATTERSON, THUEIR L. EMARK & CHRISTENSEN, P.A.

371 FORMALITIES LETTER *OC000000018689719*

Date Mailed: 05/05/2006

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

Copy of the International Application filed on 01/18/2006

DUCKETED

- Copy of the International Search Report filed on 01/18/2006
- Preliminary Amendments filed on 01/18/2006
- U.S. Basic National Fees filed on 01/18/2006
- Priority Documents filed on 01/18/2006
- Specification filed on 01/18/2006
- Claims filed on 01/18/2006
- Abstracts filed on 01/18/2006
- Drawings filed on 01/18/2006

Missing Requirements due	7 -5 -06
Per 1 month extension	8-5-06
Per 2 month extension	9-5-06
Per 3 month extension	16-5-06
Per 4 month extension	11-5-06
Per 5th & final extension	12.5.06

U

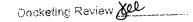
The applicant needs to satisfy supplemental fees problems indicated below.

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$130 for a Large Entity:



ুৰ \$130 Surcharge.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice **MUST** be returned with the response.

PATRICIA A BOOKER

Telephone: (703) 308-9140 EXT 204

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/565,012	PCT/JP04/10232	2842.43US01

FORM PCT/DO/EO/905 (371 Formalities Notice)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of:

Shigeo Kittaka et al.

Attorney Docket No.: 2842.43US01

Application No.:

10/565,012

Confirmation No.: 5168

Filed:

January 18, 2006

For:

PHOTONIC CRYSTAL WAVEGUIDE, HOMOGENEOUS MEDIUM WAVEGUIDE,

AND OPTICAL DEVICE

SUBMISSION OF DOCUMENTS

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Enclosed for filing in the above-identified application are the following documents:

- 1. Transmittal Letter to the United States Designated/Elected Office Concerning a Filing Under 35 U.S.C. 371 (3 pgs.);
- 2. Copy of Notice of Missing Requirements (2 pgs.);
- 3. Declaration and Power of Attorney for Patent Application (4 pgs.);
- 4. Check in the amount of \$130.00; and
- 5. Return receipt postcard.

The Commissioner is authorized to charge to Deposit Account No. 16-0631 any underpayments, overpayments or additionally required fees.

Respectfully submitted,

Douglas J. Christensen Registration No. 35,480

Customer No. 24113

Patterson, Thuente, Skaar & Christensen, P.A.

4800 IDS Center, 80 South 8th Street

Minneapolis, Minnesota 55402-2100

Telephone: (612) 349-3001

Please grant any extension of time necessary for entry; charge any fee due to Deposit Account No. 16-0631.

CERTIFICATE OF EXPRESS MAIL

Express Mail Label No.: <u>EV8041806535US</u>

Date of Deposit: <u>05 July 2006</u>

I hereby certify that this paper is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10 on the date indicated above and is addressed to the Sommissioner for Patents, P.O. Box 1450, Alexandria, VA 22313.

Doris Whitcomb
Name of Person Making Deposit

Signature